Appendix A

Questionnaire and scoring key

For 49 questionnaire items, scores were assigned [1-3] to each response based on association with healthy dietary habits and healthy lifestyle. Higher points were given to responses with healthy dietary habits and healthy lifestyle, lower points were given to responses with bad dietary habits and lifestyle habits.

The information collected to assess the different indicators is shown below:

**Diet:** Questions were formulated referring to the frequency of consuming of the different food groups, the amount of liquid and the amount of soft drinks.

**Substance abuse:** Questions focused on the consumption of alcohol and tabaco.

**Physical activity:** Questions were asked regarding the frequency and types of physical activities.

**Relaxation:** Questions focused on the hours of sleep time, average time spent per day in front of the computer, tablet, phone or TV and the way to spend free time.

**State of health:** Questions focused on factors to be most likely to state of health, main factors affecting mental state and types of chronic conditions.

*Personal data:*

***1. Please mention your age (in years): ……………………..***

***2. Please mention your gender:***

|  |  |
| --- | --- |
| Male | 1 |
| Female | 2 |
| Other | 3 |

***3. Please mention your currently reside:***

|  |  |
| --- | --- |
| Town | 1 |
| Commune/Village | 2 |

***4. Please mention your employment status:***

|  |  |
| --- | --- |
| Unemployed | 1 |
| Socially assisted | 2 |
| Householder | 3 |
| Retired | 4 |
| Student | 5 |
| Teleworking | 6 |
| I go to work every day | 7 |
| I work in a mixed regime (telework and commuting)  | 8 |

***5. Please state your marital status:***

|  |  |
| --- | --- |
| Single | 1 |
| Divorced / separated | 2 |
| Married | 3 |

***6. Please mention the level of education:***

|  |  |
| --- | --- |
| General/primary studies | 1 |
| Secondary education (baccalaureate degree) | 2 |
| Post-secondary studies | 3 |
| Higher education (bachelor's degree) | 4 |
| Postgraduate studies (master's, residency, doctorate, other specializations) | 5 |

*Anthropometric data*

***7. Please mention your weight (in kg): ………….***

***8. Please mention your height (in cm): …………***

**BMI** was assessed according to the World Health Organization criteria and defined as a person's weight in kilograms divided by their squared height in meters (kg/m2).

*Eating habits:*

***9. What is the main type of dietary fat consumed?***

|  |  |
| --- | --- |
| Margarine | 1 |
| Lard, tallow | 2 |
| Butter | 3 |
| Refined vegetable oil | 4 |
| Extra virgin or virgin vegetable oil | 5 |

***10. How many servings of vegetables (approx. 100 g) do you eat every day?***

|  |  |
| --- | --- |
| Very rarely or not at all | 1 |
| One | 2 |
| Two | 3 |
| Three | 4 |
| More than three | 5 |

***11. How many servings of fruit (approx. 100 g) do you eat every day?***

|  |  |
| --- | --- |
| Very rarely or not at all | 1 |
| One | 2 |
| Two | 3 |
| Three | 4 |
| More than three | 5 |

***12. How often do you eat meat?***

|  |  |
| --- | --- |
| Very rarely or not at all | 1 |
| Once a week | 2 |
| Twice a week | 3 |
| More than 2 times a week | 5 |
| Daily | 4 |

***13. How often do you consume carbonated or sweetened drinks (1 portion = 330 ml, a glass)?***

|  |  |
| --- | --- |
| Daily | 1 |
| More than 2 times a week | 2 |
| Twice a week | 3 |
| Once a week | 4 |
| Very rarely or not at all | 5 |

***14. How often do you consume alcoholic beverages (1 glass of wine=125ml, 1 glass of soft drink spirits =50ml)?***

|  |  |
| --- | --- |
| Daily more than one serving | 1 |
| One serving daily | 2 |
| More than 2 times a week | 3 |
| Twice a week | 4 |
| Once a week | 5 |
| Very rarely or not at all | 6 |

***15. How often do you eat fish or seafood?***

|  |  |
| --- | --- |
| Very rarely or not at all | 1 |
| Once a week | 2 |
| Twice a week | 3 |
| More than 2 times a week | 4 |
| Daily | 5 |

***16. How often do you eat sweets / pastries?***

|  |  |
| --- | --- |
| Daily | 1 |
| More than 2 times a week | 2 |
| Twice a week | 3 |
| Once a week | 4 |
| Very rarely or not at all | 5 |

***17. How often do you eat pasta, rice or other grains?***

|  |  |
| --- | --- |
| Very rarely or not at all | 1 |
| Once a week | 2 |
| Twice a week | 3 |
| More than 2 times a week | 4 |
| Daily | 5 |

***18. How much bread do you eat per day?***

|  |  |
| --- | --- |
| More than 12 slices | 1 |
| 8-12 slices | 2 |
| 5-7 slices | 3 |
| 1-4 slices | 4 |
| Very rarely or not at all | 5 |

***19. How often do you consume dairy products?***

|  |  |
| --- | --- |
| Very rarely or not at all | 1 |
| Once a week | 2 |
| Twice a week | 3 |
| More than 2 times a week | 4 |
| Daily | 5 |

***20. How many eggs do you eat per week?***

|  |  |
| --- | --- |
| Very rarely or not at all | 1 |
| 1 - 2 eggs | 2 |
| 3 - 4 eggs | 3 |
| 5 - 7 eggs | 5 |
| More than 7 eggs | 4 |

***21. Which food category do you eat most often?***

|  |  |
| --- | --- |
| Fast food products | 1 |
| Pizza, snacks, pastries, sweets | 2 |
| Products made from sausages and preserves | 3 |
| Food cooked in restaurants | 4 |
| Home cooked food | 5 |

***22. What type of cooked food do you eat most often?***

|  |  |
| --- | --- |
| Fried foods | 1 |
| Food prepared by cooking on wood or coals | 2 |
| Grilled food | 3 |
| Food prepared in the oven | 4 |
| Boiled or steamed foods | 5 |
| Non-thermally processed foods | 6 |

***23. How much water do you drink per day?***

|  |  |
| --- | --- |
| Under 1L | 1 |
| 1 L | 2 |
| 2 L | 3 |
| 3 L | 4 |
| Over 3 L | 5 |

***24. Which category of liquids do you tend to consume most often?***

|  |  |
| --- | --- |
| Alcoholic drinks: sparkling drinks / wine, beer, etc. | 1 |
| Carbonated or sweetened non-alcoholic drinks | 2 |
| Coffee | 3 |
| What do you have | 4 |
| Plain water and natural juices | 5 |

***25. Which category of food products predominates in the daily diet?***

|  |  |
| --- | --- |
| Produce seafood preparations | 0-if unchecked; 1-if checked |
| Cereals  | 0-if unchecked; 1-if checked |
| Fish and pasta | 0-if unchecked; 1-if checked |
| Dairy products | 0-if unchecked; 1-if checked |
| Meat and meat preparations | 0-if unchecked; 1-if checked |
| Sweets and pastries | 0-if unchecked; 1-if checked |
| Foods high in fat | 0-if unchecked; 1-if checked |
| Min 1 and Max 7 per respondent |

***26. What type of meat do you eat most often?***

|  |  |
| --- | --- |
| Fish and/or seafood | 5 |
| Bird meat | 4 |
| Rabbit meat | 4 |
| Beef | 7 |
| Game meat | 1 |
| Pork | 3 |
| Mutton | 2 |
| Goat meat | 3 |
| Other | 1 |
| I don't eat meat | 1 |

*Lifestyle:*

***27. How are meals distributed per day?***

|  |  |
| --- | --- |
| Consuming 1-2 meals a day without a fixed schedule | 1 |
| I eat 3 meals a day without a fixed schedule | 2 |
| I eat 3 meals a day and 1-2 snacks without a fixed schedule | 3 |
| Consume 3 meals a day according to a fixed schedule | 4 |
| Consume 3 meals a day and 1-2 snacks according to a fixed schedule | 5 |

***28. How do you rate the amount of food consumed daily?***

|  |  |
| --- | --- |
| I consider myself a chaotic, excessive eater | 1 |
| I believe that I eat chaotically, insufficiently | 2 |
| Weighted food consumption, without excesses | 3 |
| Consume food according to the needs of the body by monitoring the weight | 4 |
| I eat food according to the ration established by a specialist | 5 |

***29. Do you think that your diet has affected your health?***

|  |  |
| --- | --- |
| I do not know | 1 |
| Yes, because I eat junk food | 2 |
| Yes, because I overeat | 3 |
| Yes, because I don't eat enough | 4 |
| No | 5 |

***30. When you serve the meal how do you do it?***

|  |  |
| --- | --- |
| I generally eat in a hurry | 1 |
| During the meal I usually do something else | 2 |
| They serve the meal quietly and unhurriedly | 3 |

***31. Do you think you need the advice of a nutritionist?***

|  |  |
| --- | --- |
| Yes, to help me choose healthy foods | 3 |
| Yes, to help me eat weighted | 2 |
| No | 1 |

***32. Which of the following factors do you consider to be most likely to affect your current state of health?***

|  |  |
| --- | --- |
| Overwork | 0-if unchecked; 1-if checked |
| Sleep quality | 0-if unchecked; 1-if checked |
| The stress | 0-if unchecked; 1-if checked |
| Unhealthy diet | 0-if unchecked; 1-if checked |
| Lack of movement | 0-if unchecked; 1-if checked |
| pollution | 0-if unchecked; 1-if checked |
| Excessive smoking | 0-if unchecked; 1-if checked |
| Excessive consumption of alcohol or drugs | 0-if unchecked; 1-if checked |
| Financial problems | 0-if unchecked; 1-if checked |
| Min 1, Max 9 per respondent |

***33. What type of diet are you currently on?***

|  |  |
| --- | --- |
| Normal, omnivorous diet | 4 |
| Vegetarian diet/variants | 2 |
| Vegan diet/variants | 3 |
| Ketogenic diet | 1 |
| Mediterranean diet | 5 |
| Other | 0 |

***34. Have you ever gone on a diet to lose weight?***

|  |  |
| --- | --- |
| Yes, often | 1 |
| Yes, very rarely | 2 |
| No | 3 |

***35. What type of activity do you do?***

|  |  |
| --- | --- |
| Work in difficult and dangerous conditions (construction site, factory, mine, etc.) | 1 |
| Work in front of the computer or special devices | 4 |
| Office work or activity with minimal movement | 5 |
| Work standing | 3 |
| Work outdoors in non-hazardous conditions | 2 |

***36. Do you usually do sports / exercise?***

|  |  |
| --- | --- |
| Not | 5 |
| Yes, very rarely | 4 |
| Yes, 2-3 times a week | 3 |
| Yes, daily under an hour | 2 |
| Yes, daily at least one hour | 1 |

***37. Where do you do sports / exercise?***

|  |  |
| --- | --- |
| The home | 0-if unchecked; 1-if checked |
| Outdoor | 0-if unchecked; 1-if checked |
| Gym | 0-if unchecked; 1-if checked |
| I don't do sports / exercise | 0-if unchecked; 1-if checked |
| Min 1, Max 3 per respondent |

***38. Do you smoke?***

|  |  |
| --- | --- |
| Yes, excessively daily | 1 |
| Yes, daily 1-2 cigarettes | 2 |
| Yes, 2-3 times a week | 3 |
| Yes, occasionally | 4 |
| No | 5 |

***39. How many hours a night you usually sleep?***

|  |  |
| --- | --- |
| I have frequent insomnia | 1 |
| Under 7 hours per night | 2 |
| Over 9 hours a night | 3 |
| 7-9 hours a night | 4 |

***40. How do you rate the state of your immune system?***

|  |  |
| --- | --- |
| I consider myself to have a strong immune system | 3 |
| I believe I have a weakened immune system | 1 |
| I regularly use various methods to strengthen the immune system | 2 |

***41. What do you consider to be the main factors affecting your mental state?***

|  |  |
| --- | --- |
| Health problems | 0-if unchecked; 1-if checked |
| Fatigue state | 0-if unchecked; 1-if checked |
| The stress | 0-if unchecked; 1-if checked |
| Overwork | 0-if unchecked; 1-if checked |
| Problems at work | 0-if unchecked; 1-if checked |
| Lack of communication, isolation | 0-if unchecked; 1-if checked |
| Inappropriate surroundings | 0-if unchecked; 1-if checked |
| Family problems | 0-if unchecked; 1-if checked |
| Financial problems | 0-if unchecked; 1-if checked |
| Min 1, Max 9 per respondent |

***42. What kind of problems do you encounter?***

|  |  |
| --- | --- |
| I am often tired | 0-if unchecked; 1-if checked |
| I am often nervous | 0-if unchecked; 1-if checked |
| I am often depressed | 0-if unchecked; 1-if checked |
| I have frequent panic attacks / anxiety states | 0-if unchecked; 1-if checked |
| I eat emotionally | 0-if unchecked; 1-if checked |
| I'm not hungry | 0-if unchecked; 1-if checked |
| I'm fine, I have no problem | 0-if unchecked; 1-if checked |
| Min 1, Max 7 per respondent |

***43. Do you go to specialist doctors when you have health problems?***

|  |  |
| --- | --- |
| Never | 1 |
| Yes, only in very serious cases | 2 |
| Yes, generally when self-medication doesn't work | 3 |
| Yes, when the state of health deteriorates more | 4 |
| Yes, every time there are problems | 5 |

***44. Do you regularly assess your health?***

|  |  |
| --- | --- |
| No | 1 |
| Yes, very rarely | 2 |
| Yes, after two years | 3 |
| Yes, once a year | 4 |
| Yes, at least twice a year | 5 |

***45. How much time do you spend on average per day in front of the computer, tablet, phone or TV?***

|  |  |
| --- | --- |
| Over 8 hours | 1 |
| 6-7 hours | 2 |
| 4-5 hours | 3 |
| 2-3 hours | 4 |
| Under 1 hour | 5 |

***46. What type of chronic conditions do you have?***

|  |  |
| --- | --- |
| Arterial Hypertension | 0-if unchecked; 1-if checked |
| Cardiovascular diseases | 0-if unchecked; 1-if checked |
| Diabetes | 0-if unchecked; 1-if checked |
| Gout | 0-if unchecked; 1-if checked |
| Obesity | 0-if unchecked; 1-if checked |
| Pulmonary diseases | 0-if unchecked; 1-if checked |
| Renal diseases | 0-if unchecked; 1-if checked |
| Autoimmune diseases | 0-if unchecked; 1-if checked |
| Gastric conditions | 0-if unchecked; 1-if checked |
| Liver diseases | 0-if unchecked; 1-if checked |
| Respiratory diseases | 0-if unchecked; 1-if checked |
| Rheumatic diseases | 0-if unchecked; 1-if checked |
| Bone disorders | 0-if unchecked; 1-if checked |
| Mental disorders | 0-if unchecked; 1-if checked |
| Other | 0-if unchecked; 1-if checked |
| I am clinically healthy | 0-if unchecked; 1-if checked |
| I do not know | 0-if unchecked; 1-if checked |
| Min 1, Max 15 per respondent |

***47. What do you feel is currently lacking for a healthier lifestyle?***

|  |  |
| --- | --- |
| Free time | 0-if unchecked; 1-if checked |
| Peaceful sleep, rest | 0-if unchecked; 1-if checked |
| Financial resources | 0-if unchecked; 1-if checked |
| Advice from a nutritionist | 0-if unchecked; 1-if checked |
| Access to quality medical services | 0-if unchecked; 1-if checked |
| Solving stressful problems | 0-if unchecked; 1-if checked |
| Communication and socialization | 0-if unchecked; 1-if checked |
| Reducing time spent on social networks or various sites | 0-if unchecked; 1-if checked |
| Nutritional knowledge | 0-if unchecked; 1-if checked |
| Movement, physical activity | 0-if unchecked; 1-if checked |
| Quality food products | 0-if unchecked; 1-if checked |
| Nothing | 0-if unchecked; 1-if checked |
| Min 1, Max 11 per respondent |

***48. How do you spend your free time?***

|  |  |
| --- | --- |
| Watching movies and TV programs | 0-if unchecked; 1-if checked |
| On social networks or on various websites | 0-if unchecked; 1-if checked |
| Reading | 0-if unchecked; 1-if checked |
| DIY (Do It Yourself) | 0-if unchecked; 1-if checked |
| With family or friends | 0-if unchecked; 1-if checked |
| Outdoor activities | 0-if unchecked; 1-if checked |
| Participation in cultural activities | 0-if unchecked; 1-if checked |
| Participation in charity events | 0-if unchecked; 1-if checked |
| Participation in training courses | 0-if unchecked; 1-if checked |
| Other ways | 0-if unchecked; 1-if checked |
| Min 1, Max 9 per respondent |

The Overall attitudinal score is the mean of the scores on all ten items (total the forty-nine items and divide by 49)

The questionary include 4 subscales, scored as followed

* „Adherence to a healthy diet” – mean of items 9-24, 26
* „Adherence to a healthy lifestyle”– mean of items 27-30, 33-36, 38, 39, 43-45
* For multiple-answer selection type questions the score of how many times each answer choice was selected by respondents was counted. Each answer point's percentage was calculated individually. To calculate the percentage of an answer, the number of responses to that point by the total number of responses was to this multiple-choice question, and multiply by 100 (to reach the percentage) – items 25, 31, 32, 37, 41, 42, 46, 47, 48

$$\frac{Number of responses for answer choice}{Number of total responses}×100$$

* the value of Cronbach’s α was 0.85, what it indicates is a good internal consistency and that the scale is reliable.
1. Hamed Taherdoost. Designing a Questionnaire for a Research Paper: A Comprehensive Guide to Design and Develop an Effective Questionnaire. Asian Journal of Managerial Science, 2022, 11, pp.8-16. doi:10.51983/ajms-2022.11.1.3087.hal-0374183
2. James BL, Loken E, Roe LS, Myrissa K, Lawton CL, Dye L, Rolls BJ. Validation of the Diet Satisfaction Questionnaire: a new measure of satisfaction with diets for weight management. Obes Sci Pract. 2018 Oct 10;4(6):506-514. doi: 10.1002/osp4.299. PMID: 30574344; PMCID: PMC6298208.
3. Dubasi SK, Ranjan P, Arora C, Vikram NK, Dwivedi SN, Singh N, Kaloiya GS, Shalimar. Questionnaire to assess adherence to diet and exercise advices for weight management in lifestyle-related diseases. J Family Med Prim Care. 2019 Feb;8(2):689-694. doi: 10.4103/jfmpc.jfmpc\_338\_18. PMID: 30984696; PMCID: PMC6436250.